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ARRIS			TRAN, NGHI V	
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Suwanee, GA 30024			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mirho@fspllc.com

Office Action Summary	Application No. 10/706,421	Applicant(s) CARTER ET AL.	
	Examiner NGHI V. TRAN	Art Unit 2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 17 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 17, and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on August 13, 2010. Claims 1, 13, and 17 have been previously amended. Claims 14-16 and 18-25 have been previously canceled. Claims 28-29 have been added. Therefore, claims 1-13, 17 and 26-29 are presented for further examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-12 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For instance, the applicants wrote in claim 1 “a plurality of individual configuration parameters that may be enable and disabled together” (emphasized added). The examiner consider the limitation “enable and disabled together” as failing to comply with the enablement requirement because the configuration parameters cannot enable and disable together at the same time. Claims 2-12 and 26 are also rejected under 35 U.S.C. 112, first paragraph, for the same rationale of claim 1 above.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 28-29 are rejected under 35 U.S.C. 101 because of the following reasons:

6. Claim 28 would reasonably be interpreted by one of ordinary skill as “machine-readable media” of signal per se, failing to fall within a statutory category of invention. As such, the system of software means alone is not a machine, and it is clearly not a process, manufacture nor composition of matter. Although the claim recites “switch” the claim actually lacks the necessary physical articles / objects / elements / components / structure / hardware such as memory and a processor to constitute a machine or manufacture within the meaning of 35 USC 101, see page 5 of the specification. They are clearly not a series of steps or acts to be process nor are they a combination of chemical compounds to be a composition of mater.

7. Claim 29 is also rejected under 35 U.S.C. 101 because they are directly on independent claim 28.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 13, 17, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Synnestvedt et al., United States Patent Number 6,598,057 (hereinafter Synnestvedt), in view of Chapman et al., United States Patent Publication Number 2006/0262722 (hereinafter Chapman).

10. With respect to claims 13 and 28, Synnestvedt teaches a system for configuring a customer equipment [= cable modem **102**] in a communication network [= Internet **108**] [see abstract], comprising:

the customer equipment [= cable modem **102**] comprising an operating software load embedded in a machine-readable media [= configuration files can be used to define the equipments' operating mode such as downstream and upstream service assignments, assigned frequencies, data rates, modulation schemes, class of service, and type of service, col.5, ll.11-32];

the operating software load comprising switch settings each controlling a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network [= locate the CTMS Group based configuration policy, step 412 and col.9, ll.43-62];

a configuration server device to adapt a configuration file with settings for the switches of operating software load of the customer equipment [= sending binary configuration file to the cable modem, step 316 of fig.3 and col.5, ll.9-10]; and

the operating software load adapted to apply the settings of the switches in the configuration file [= software upgrades as well as providing the new service of dynamically generating DOCSIS compliant configuration files to cable modem, col.3, ll.40-53] to set the switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file.

However, Synnestvedt does not explicitly show each switch turning a predetermined group of device settings on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network.

In a related art, Chapman discloses each switch turning a predetermined group of device settings on or off [= switch from a first upstream channel to a second upstream channel, see abstract], thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network [= CMTS includes software to enable the different line card, i.e. different group such as Group A **460a** and Group B **460b**, paragraphs 0044, 0074, and 0085 and fig.4].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Synnestvedt in view of Chapman by turning a predetermined group of device settings on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network because this feature enables a dynamic channel change request [Chapman, paragraph 0017]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to receive downstream transmissions on the selected downstream channel [Chapman, paragraph 0017].

12. With respect to claims 17 and 29, Synnestvedt further teaches wherein the switches of the operating software load control groups of TLV values that determine content of messages between the customer equipment and the equipment of the communication network [col.14, ll.24 through col.15, ll.46].

13. With respect to claim 27, Synnestvedt further teaches logic configured to provision the customer equipment responsive to at least one of the representative values in the configuration file [fig.3].

Response to Arguments

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14. Applicant's arguments filed August 13, 2010 have been fully considered but they are not persuasive as following: Synnestvedt teaches a system for configuring a customer equipment [= cable modem **102**] in a communication network [= Internet **108**] [see abstract], comprising: the customer equipment [= cable modem **102**] comprising an operating software load embedded in a machine-readable media [= configuration files can be used to define the equipments' operating mode such as downstream and upstream service assignments, assigned frequencies, data rates, modulation schemes, class of service, and type of service, col.5, ll.11-32]; the operating software load comprising switch settings each controlling a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network [= locate the CTMS Group based configuration policy, step 412 and col.9, ll.43-62]; a configuration server device to adapt a configuration file with settings for the switches of operating software load of the customer equipment [= sending binary configuration file to the cable modem, step 316 of fig.3 and col.5, ll.9-10]; and the operating software load adapted to apply the settings of the switches in the configuration file [= software upgrades as well as providing the new service of dynamically generating DOCSIS compliant configuration files to cable modem, col.3, ll.40-53] to set the switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file. However, Synnestvedt does not explicitly show each switch turning a predetermined group of device settings on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the

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configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network. In a related art, Chapman discloses each switch turning a predetermined group of device settings on or off [= switch from a first upstream channel to a second upstream channel, see abstract], thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network [= CMTS includes software to enable the different line card, i.e. different group such as Group A **460a** and Group B **460b**, paragraphs 0044, 0074, and 0085 and fig.4].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Synnestvedt in view of Chapman by turning a predetermined group of device settings on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network because this feature enables a dynamic channel change request [Chapman, paragraph 0017]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to receive downstream transmissions on the selected downstream channel [Chapman, paragraph 0017].

15. In response to the applicant's argument regarding 35 U.S.C. 112, first paragraph, that the examiner's interpretation, the parameters of a subset are both enabled and disabled at the same time, instead of enabled together and disabled together, is unreasonable and in contravention of common sense, context, rules of grammar, the examiner respectfully disagrees. Enabled and disabled configuration parameters together fail to comply with the enablement requirement because the configuration parameters cannot enable and disable together at the same time. For example, the configuration network device can not enable the configuration parameter and disabled configuration parameter at the same time.

16. In response to the applicant's argument that claims 28 and 29 describe a cable modem, which belongs to a statutory class of inventions, the examiner respectfully disagrees. The recitation "cable modem" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Further, the claim limitation would reasonably be interpreted by one of ordinary skill as "machine-readable media" of signal per se, failing to fall within a statutory category of invention.

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17. In response to the applicant's argument that Synnestvedt does not disclose a configuration file with setting for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, the examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Synnestvedt does not disclose a configuration file with setting for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file. In a related art, Chapman discloses a configuration file with setting for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off [= switching from a first upstream channel to a second upstream channel, see abstract], thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file [= CMTS includes software to enable the different line card, i.e. different group such as Group A 460a and/or Group B 460b, paragraphs 0044, 0074, and 0085, and fig.4]. Therefore, in the

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combination of Synnestvedt in view of Chapman disclose claimed feature as show in above.

18. In response to the applicant's argument that Synnestvedt does not disclose the configuration files has settings for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group of device setting on or off, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network, the examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Synnestvedt does not disclose Synnestvedt does not disclose the configuration files has settings for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group of device setting on or off, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network. In a related art, Chapman discloses the configuration files has settings for

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switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group [= Group A and/or Group B] of device setting on or off [= switching from a first upstream channel to a second upstream channel, see abstract], each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network [= CMTS includes software to enable the different line card, i.e. different group such as Group A 460a and/or Group B 460b, paragraphs 0044, 0074, and 0085, and fig.4]. Therefore, in the combination of Synnestvedt in view of Chapman disclose claimed feature as show in above.

19. In response to the applicant's argument that Chapman does not disclose an operating software load of the customer equipment includes switch settings each controlling a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, where each switch turns a predetermined group of device settings on or off, where each predetermined group includes a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network, the examiner respectfully disagrees. Chapman discloses the configuration files has settings for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a

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predetermined group [= Group A and/or Group B] of device setting on or off [= switching from a first upstream channel to a second upstream channel, see abstract], each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network [= CMTS includes software to enable the different line card, i.e. different group such as Group A 460a and/or Group B 460b, paragraphs 0044, 0074, and 0085, and fig.4]. Therefore, in the combination of Synnestvedt in view of Chapman disclose claimed feature as show in above.

20. In response to the applicant's argument that neither reference discloses the claimed configuration file comprising settings for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file, the examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Synnestvedt does not disclose a configuration file with setting for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off, thus enabling or disabling entire groups of settings of the customer equipment for each

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switch setting of the configuration file. In a related art, Chapman discloses a configuration file with setting for the switches of operating software load of the customer equipment where the switches in the configuration file set switches of the operating software load on or off [= switching from a first upstream channel to a second upstream channel, see abstract], thus enabling or disabling entire groups of settings of the customer equipment for each switch setting of the configuration file [= CMTS includes software to enable the different line card, i.e. different group such as Group A 460a and/or Group B 460b, paragraphs 0044, 0074, and 0085, and fig.4]. Therefore, in the combination of Synnestvedt in view of Chapman disclose claimed feature as show in above.

21. In response to the applicant's argument that neither reference discloses the configuration file has setting for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group of device settings on or off, each predetermined group comprising a plurality of setting which either are or are not implemented by a particular type of the equipment of the communication network. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Synnestvedt

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does not disclose Synnestvedt does not disclose the configuration files has settings for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group of device setting on or off, each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network. In a related art, Chapman discloses the configuration files has settings for switches in the modem load module where each switch setting controls a predetermined group of device settings for compatible operation between the customer equipment and equipment of the communication network, each switch turning a predetermined group [= Group A and/or Group B] of device setting on or off [= switching from a first upstream channel to a second upstream channel, see abstract], each predetermined group comprising a plurality of settings which either are or are not implemented by a particular type of the equipment of the communication network [= CMTS includes software to enable the different line card, i.e. different group such as Group A 460a and/or Group B 460b, paragraphs 0044, 0074, and 0085, and fig.4]. Therefore, in the combination of Synnestvedt in view of Chapman disclose claimed feature as show in above.

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGHI V. TRAN whose telephone number is (571)272-4067. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Nghi V Tran
Examiner
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